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Re: US v Lisa M. Montgomery, No. 05-06002-01-CR-SJ-GAF

## Comment upon Oct 2, 2007 responseby Dr. Ruben Gur

prepared by

## **Alan Evans PhD and Helen Mayberg MD**

There is little else to be said that has not already been stated previously. The issue is not which is the better method of normalization, it is the fact that a different method was used for normalizing LM's PET data than for the control subjects. One cannot compare apples and oranges. We have shown repeatedly the consequences of such a mismatch in normalization strategies. Regardless of whether one uses the regional average (GM) or whole brain (WB) value for normalization, LM's profile is comparable with the control profile if one uses the same normalization strategy for both profiles. We used GM in our most recent re-analysis since there has been uncertainty over whether we had access to the WB value for the controls. Dr. Gur now acknowledges in his Oct 2 report that he has not been able to produce the WB numbers that were used by the PET Center for calculating the R/WB values shown in Figure 4 of his original report.

All that has ever been required here is a spreadsheet **with regional labels**, listing the 36 regional values plus the whole brain value for each of the 23 subjects and LM (a spreadsheet of 37 x 24 values) whose PET data make up Figure 4a of the original Gur report. This is not a large or unreasonable request. Instead, we have received irrelevant data from other control subjects, data in the form of unlabelled text streams that we have endeavoured to decipher and assertions that everything we needed was there.

It is essential that we focus on the central point. When one uses the same normalization strategy for LM and the controls, the apparently elevated profile of LM disappears.